

I. Amendments to the Claims

Please amend the claims as follows with the following version of the claims in accordance with revised 37 CFR § 1.121.

1. (Currently Amended) An apparatus for managing a digital certificate on a distributed computing system, the apparatus comprising:

at least one reception software module that receives a request from a user and generates a reception event corresponding to that request;

at least one processing software module, communicatively coupled to the at least one reception software module and responsive to a propagated event, that performs an action regarding the management of the digital certificate such that a combination of processing software modules perform functionality representing a registration authority and/or a certificate authority;

any one of the processing software modules replaceable with another software module responsive to the same propagated event but performing another action regarding the management of the digital certificate, and each of the processing software modules are adaptively configurable to perform specifiable functionality in the management of the digital certificate; and

the software modules executing independently from one another.

2. (Original) The apparatus of claim 1, wherein the reception software module is implemented in a computing system independent manner.

3. (Original) The apparatus of claim 2 wherein the reception software module is implemented in Java.

5 4. (Original) The apparatus of claim 1 wherein one of the at least one processing software modules is a sink bean.

5. (Original) The apparatus of claim 4 wherein the sink bean is a certificate generation bean.

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6. (Original) The apparatus of claim 1 wherein one of the at least one processing software modules publishes information regarding the management of the certificate.

15 7. (Original) The apparatus of claim 6 wherein the one of the at least one software modules publishes information in an LDAP directory.

8. (Original) The apparatus of claim 1 wherein two of the
20 software modules operate on different computing devices.

9. (Currently Amended) A computer program product on a computer usable medium, the computer usable medium having a computer usable program embodied therein for managing a digital certificate on a distributed computing system, the computer
5 usable program including:

instructions for receiving a request from a user and generating a reception event corresponding to that request;

instructions for performing an action regarding the management of the digital certificate such that the instructions
10 perform functionality representing a registration authority
and/or a certificate authority, the instructions for performing communicatively coupled to the instructions for receiving and responsive to a propagated event;

any one of the instructions replaceable with another set of
15 instructions responsive to the same propagated event but performing another action regarding the management of the digital certificate, and any of the instructions are adaptively
configurable to perform specifiable functionality in the
management of the digital certificate; and

20 the instructions executing independently from one another.

10. (Original) The computer program product of claim 9, wherein the instructions for receiving are implemented in a computing system independent manner.

11. (Original) The computer program product of claim 10
wherein the instructions for receiving are implemented in Java.

12. (Original) The computer program product of claim 9
5 wherein instructions for performing are a sink bean.

13. (Original) The computer program product of claim 12
wherein the sink bean is a certificate generation bean.

10 14. (Original) The computer program product of claim 9
wherein the instructions for performing publishes information
regarding the management of the certificate.

15 15. (Original) The computer program product of claim 14
wherein the instructions for performing publishes information in
an LDAP directory.

16. (Original) The computer program product of claim 9
wherein the instructions operate on different computing devices.

17. (Currently Amended) A method for managing a digital certificate on a distributed computing system, the method comprising:

receiving a request from a user in at least one reception software module;

generating a reception event corresponding to that request;

performing an action regarding the management of the digital certificate in response to a received event in an at least one processing software module such that a combination of processing software modules perform functionality representing a registration authority and/or a certificate authority, the at least one processing software module communicatively coupled to the at least one reception software module;

any one of the software modules replaceable with another software module responsive to the same propagated event but performing another action regarding the management of the digital certificate, and any of the software modules are adaptively configurable to perform specifiable functionality in the management of the digital certificate; and

the software modules executing independently from one another.

18. (Original) The method of claim 17, wherein the reception software module is implemented in a computing system independent manner.

19. (Original) The method of claim 18 wherein the reception software module is implemented in Java.

5 20. (Original) The method of claim 17 wherein one of the at least one processing software modules is a sink bean.

21. (Original) The method of claim 19 further comprising generating a certificate in the bean.

10 22. (Original) The method of claim 19 further comprising publishing information regarding the management of the certificate in one of the at least one processing software modules.

15 23. (Original) The method of claim 22 step of publishing is publishing to an LDAP directory.

20 24. (Original) The method of claim 17 wherein two of the software modules operate on different computing devices.

25. (Currently Amended) An apparatus for managing a digital certificate on a distributed computing system, the apparatus comprising:

5 a plurality of reception software modules that receive a request from a user and generate a reception event corresponding to that request;

at least one processing software module, communicatively coupled to the at least one reception software module and responsive to a propagated event, that performs an action
10 regarding the management of the digital certificate such that a combination of processing software modules perform functionality representing a registration authority and/or a certificate authority;

any one of the plurality of reception software modules
15 replaceable with another reception software module responsive to a request in a differing format, and propagating the same event as that by the replaced reception software module, wherein any of the reception software modules are adaptively configurable to perform specifiable functionality in the management of the
20 digital certificate; and

the software modules executing independently from one another.

26. (Original) The apparatus of claim 25, wherein the plurality of reception software modules are implemented in a computing system independent manner.

5 27. (Original) The apparatus of claim 26 wherein the plurality of reception software modules are implemented in Java.

10 28. (Original) The apparatus of claim 25 wherein one of the at least one processing software modules generates a digital certificate.

29. (Original) The apparatus of claim 25 wherein one of the at least one processing software modules publishes information regarding the management of the certificate.

30. (Currently Amended) A computer program product on a computer usable medium, the computer usable medium having a computer usable program embodied therein for managing a digital certificate on a distributed computing system, the computer
5 usable program including:

a plurality of instructions for receiving a request from a user and generating a reception event corresponding to that request;

one or more instructions for performing an action regarding
10 the management of the digital certificate such that the instructions perform functionality representing a registration authority and/or a certificate authority, the instructions for performing communicatively coupled to the instructions for receiving and responsive to a propagated event;

15 any one of the instructions for receiving replaceable with another instruction for receiving responsive to a different format request and generating the reception event, and any of the instructions are adaptively configurable to perform specifiable functionality in the management of the digital certificate; and
20 the instructions executing independently from one another.

31. (Original) The computer program product of claim 30, wherein the plurality of instructions for receiving are implemented in a computing system independent manner.

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32. (Original) The computer program product of claim 31 wherein the plurality of instructions for receiving are implemented in Java.

5 33. (Original) The computer program product of claim 30 wherein the one or more instructions for performing generates a digital certificate.

10 34. (Original) The computer program product of claim 30 wherein the one or more instructions for performing publishes information regarding a digital certificate.

35. (Currently Amended) A method for managing a digital certificate on a distributed computing system, the method comprising:

receiving a request in a first format from a user in one of a plurality of reception software modules;

generating a reception event corresponding to that request;

performing an action regarding the management of the digital certificate in response to a received event in an at least one processing software module such that a combination of processing software modules perform functionality representing a registration authority and/or a certificate authority, the at least one processing software module communicatively coupled to the plurality of reception software modules;

any one of plurality of reception software modules replaceable with another reception software module responsive to a request in a second format and generating the reception event, wherein any of the reception software modules are adaptively configurable to perform specifiable functionality in the management of the digital certificate; and

the software modules executing independently from one another.

36. (Original) The method of claim 35, wherein the plurality of reception software modules are implemented in a computing system independent manner.

37. (Original) The method of claim 36 wherein the plurality of reception software modules are implemented in Java.

5 38. (Original) The method of claim 35 further comprising generating a certificate in one of the at least one processing software module.

10 39. (Original) The method of claim 35 further comprising publishing information regarding the management of the certificate in one of the at least one processing software modules.

40. (Currently Amended) An apparatus for managing a digital certificate on a distributed computing system, the apparatus comprising:

at least one reception software module that receives a request from a user and generates a reception event corresponding to that request;

at least one processing software module, communicatively coupled to the at least one reception software module and responsive to a propagated event, that performs an action regarding the management of the digital certificate such that a combination of processing software modules perform functionality representing a registration authority and/or a certificate authority;

at least one transmission software module, communicatively coupled to the at least one processing software module, that transmits information regarding the digital certificate on the distributed computing system in a first format in response to a propagated event;

the at least one transmission software module replaceable with another reception software module responsive to the same event that ~~the~~ the replaced transmission ~~transmission~~ software module is responsive to, and transmitting information in a second format, wherein any of the transmission software modules are adaptively configurable to perform specifiable functionality in the management of the digital certificate; and

the software modules executing independently from one another.

41. (Original) The apparatus of claim 40, wherein the at
5 least one reception software module and the at least one
transmission software module are implemented in a computing
system independent manner.

42. (Original) The apparatus of claim 41 wherein the at
10 least one reception software module and the at least one
transmission software module are implemented are implemented in
Java.

43. (Original) The apparatus of claim 40 wherein one of the
15 at least one processing software modules generates a digital
certificate.

44. (Original) The apparatus of claim 40 wherein one of the
at least one processing software modules publishes information
20 regarding the management of the certificate.

45. (Currently Amended) A computer program product on a computer usable medium, the computer usable medium having a computer usable program embodied therein for managing a digital certificate on a distributed computing system, the computer
5 usable program including:

instructions for receiving a request from a user and generating a reception event corresponding to that request;

one or more instructions for performing an action regarding the management of the digital certificate such that the
10 instructions perform functionality representing a registration authority and/or a certificate authority, the instructions for performing communicatively coupled to the instructions for receiving and responsive to a propagated event and generating an event;

15 a first instructions for transmitting information in a first format regarding the digital certificate on the distributed computing system in a first format in response to a propagated event, the instructions communicatively coupled to the at least one processing software module;

the first instructions for transmitting replaceable with a second instructions for transmitting, the second instructions for transmitting responsive to the same event that first instructions were responsive to and transmitting information regarding the digital certificate in a second format, and any of the instructions are adaptively configurable to perform specifiable functionality in the management of the digital certificate; and the instructions executing independently from one another.

46. (Original) The computer program product of claim 45, wherein the first instructions for transmitting and the second instructions for transmitting are implemented in a computing system independent manner.

47. (Original) The computer program product of claim 46 wherein the first instructions for transmitting and the second instructions for transmitting are implemented in Java.

48. (Original) The computer program product of claim 45 wherein the one or more instructions for performing generates a digital certificate.

49. (Original) The computer program product of claim 45 wherein the one or more instructions for performing publishes information regarding a digital certificate.

50. (Currently Amended) A method for managing a digital certificate on a distributed computing system, the method comprising:

receiving a request in a first format from a user in one or more reception software modules;

generating a reception event corresponding to that request;

performing an action regarding the management of the digital certificate in response to a received event in an at least one processing software module such that a combination of processing software modules perform functionality representing a registration authority and/or a certificate authority, the at least one processing software module communicatively coupled to the plurality of reception software modules;

transmitting information regarding the digital certificate in a first format from a first transmission software module upon the reception of a propagated event;

the first transmission software module replaceable with a second transmission software module, the second transmission software module responsive to the propagated event and transmitting information regarding the digital certificate in a second format, wherein any of the transmission software modules are adaptively configurable to perform specifiable functionality in the management of the digital certificate; and

the software modules executing independently from one another.

51. (Original) The method of claim 50, wherein the first transmission software module and the second transmission software module are implemented in a computing system independent manner.

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52. (Original) The method of claim 51 wherein the first transmission software module and the second transmission software module are implemented in Java.

10 53. (Original) The method of claim 50 further comprising generating a certificate in one of the at least one processing software module.

15 54. (Original) The method of claim 50 further comprising publishing information regarding the management of the certificate in one of the at least one processing software modules.